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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,032	01/21/2004	Steven J. Lenius	59504US002	3942

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EXAMINER

TADESSE, YEWEBDAR T

ART UNIT

PAPER NUMBER

1734

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/762,032

Applicant(s)

LENIUS, STEVEN J.

Examiner

Yewebdar T Tadesse

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-12 and 14-20 is/are rejected.
- 7) ☒ Claim(s) 7 and 13 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All. b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>09132004</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: on page 3, line 23, a blank space is provided to refer to co-pending application U.S. Serial no.

Appropriate correction is required.

2. Claim 19 is objected to because of the following informalities: on line 5, the phrase " a fist inner portion that varies decreases" is grammatically incorrect.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Kulling (US 4,740,390). As to claim 1, Kulling discloses (see Figs 1-2) a coater for preparing coated particles comprising a rotatable disc (22,122) having a periphery; and a restrictor (wall 26,126) mounted adjacent to the disc (22,122) so as to provide a gap (58, 158) for the egress of coated particles. With respect to claim 2, Kulling discloses (see Fig 2 and column 5, line 57) the restrictor (wall 126) having a frusto-conical shape portion (tapered portion) as a result the height of the space between the disc and the

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restrictor (wall 126) diminishes with radial distance from the center of the disc (122).

Regarding claim 6, Kulling describes the disc (22, 122) can be made with a high coefficient of friction relative to the particles (i.e. roughened –column 4, line 25). As to claim 8, Kulling discloses the gap (58,158) between the disc (22,122) and the restrictor (wall 26, 126) is adjustable (see column 4, lines 43-44).

5. Claims 1-4,6, 9-10 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Hough (US 3,288,052). As to claim 1-2, Hough discloses (see Figs 1-2 and column 2, line 58) a coater for preparing coated particles comprising a rotatable disc (distribution disc 46) having a periphery and a restrictor (frustoconical ring 90) mounted adjacent to the disc so as to provide a gap for the egress of coated particles and the height of the space between the disc and the restrictor (90) decreases with radial distance from the center of the disc (46). As to claim 3, Hough discloses a dispenser (hopper 68) for particles disposed above the disc (46). As to claim 4, Hough's dispenser (hopper 68) is capable of dispensing a mixture of particles and resin. Regarding claim 6, Hough's disc (46) is made with a high coefficient of friction relative to the particles. This is evident from the disclosure at column 3, lines 5-34 whereby the disc moves the granules. With respect to claim 9, Hough discloses a collection bin (housing 12) disposed beneath the disc (46). With respect to claim 10, Hough discloses a barrier (annular wall 98) capable of diverting coated particles emerging from the gap into the collection bin (housing 12). As to claim 19, Hough discloses (see Figs 1-2 and column 2, line 58) a coater for preparing coated particles comprising a rotatable disc

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(distribution disc 46) having a surface engaging the particles, a barrier (annular wall 98) disposed adjacent the disc surface; and a gap created between the barrier (98) and the disc surface (46), the gap is capable of including (see Fig. 2) a first inner portion that varies decreases linearly with the radius of the disc; and a second outer portion parallel to the disc, the second portion disposed near the perimeter of the disc.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kulling (US 4,740,390) as applied to claim 1 and further in view of Hough (US 3,288,052). Although Kulling lacks teaching a dispenser for particles, an inner processing area filled with particles and dispensers (several dosing device 131 capable of dispensing particles) disposed above the disc are taught in Kulling (see column 5,

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lines 63-64 and column 6, lines 6-10). In any event, Hough discloses dispenser (hopper 68) for particles disposed above the disc (46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a particle dispenser above the disc in Kulling to deliver the particles into the processing section of the coating apparatus.

9. Claims 11-12 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kulling (US 4,740,390) in view of Hough (US 3,288,052). As to claim 11, Kulling is cited for the same reasons discussed above (see paragraph 4). Kulling further discloses a motor (18) for spinning the disc. Kulling lacks teaching a dispenser for particles. However, an inner processing area filled with particles and dispensers (several dosing device 131 capable of dispensing a mixture of particles or glass beads) disposed above the disc are taught in Kulling (see column 5, lines 63-64 and column 6, lines 6-10). Regardless, Hough discloses dispenser (hopper 68) for particles disposed above the disc (46) capable of dispensing a mixture of sand particles and polymeric resin. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a particle dispenser above the disc in Kulling to deliver the particles into the processing section of the coating apparatus. Regarding claim 12, Kulling describes the disc (22, 122) can be made with a high coefficient of friction relative to the particles (i.e. roughened –column 4, line 25). As to claims 14-15, Kulling discloses the gap (58,158) between the disc (22,122) and the restrictor (wall 26, 126) is adjustable (see column 4, lines 43-44) and the gap is capable of being between about

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one and three times the diameter of the sand particles. As to claim 16, Kulling lacks teaching a collection bin disposed beneath the disc. Hough discloses a collection bin (housing 12) disposed beneath the disc (46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a collection bin in Kulling to collect the coated particles as desired. With respect to claim 17, Hough discloses a barrier (annular wall 98) capable of diverting coated particles emerging from the gap into the collection bin (12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a particle dispenser above the disc in Kulling as modified to smoothly direct the particles towards the collection container.

10. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kulling (US 4,740,390) in view of Hough (US 3,288,052) as applied to claim 11 above and further in view of Inoue et al (US 4,834,545). Kulling teaches a motor (18, 118) for spinning the disc (22, 122). The speed of the disc spun by the motor at about 360-720 rpm is not taught by Kulling. However a motor rotating a disc at the claimed range of speed is well known in the art. For instance, Inoue et al discloses a motor rotating disc (cone plate 23) at a maximum speed of 500 rpm. It would have been obvious to one of ordinary skill in the art at the time the invention was made to rotate at the claimed speed in Kulling as desired.

11. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hough (US 3,288,052) as applied to claim 19 above and further in view of Kulling (US

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4,740,390). Hough lacks teaching a raised structure on the disc surface. Kulling discloses (see Figs 1-2 and columns 3-4, lines 62-68 and 1-6 respectively) a raised structure (cone 24, 124) on the disc (22, 122), wherein the raised structure includes a portion that extends into the gap (cone-shaped disc having a portion extending into the gap).). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a disc having a raised structure, wherein the raised structure including a portion that extends into the gap in Hough to promote movement of particles away from the center of the disc as taught by Kulling.

Allowable Subject Matter

12. Claims 7 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. Prior art of record does not disclose or suggest a coater for preparing coated particles comprising, among others, the surface of the disc facing the restrictor comprising a polymeric foam material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yewebdar T Tadesse whose telephone number is (571) 272-1238. The examiner can normally be reached on Monday-Friday 8:00 AM-4: 30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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